

Appl. No. 09/841,774  
Reply to Office Action of November 17, 2004

Attorney Docket No. 35271.8  
Customer No. 27683

**REMARKS**

Claims 1-20 are pending in the application. In view of the remarks that follow, Applicants respectfully request reconsideration of the application.

**Patentable Subject Matter**

Noted with appreciation is the indication in the Office Action that Claims 1 and 2 have been allowed.

Also noted with appreciation is the indication that Claims 5, 7-11, 14 and 16-20 are directed to allowable subject matter, and would be allowed if rewritten in independent form. These claims each depend directly or indirectly from one of independent Claims 3 and 12, and Claims 3 and 12 are each believed to be allowable for reasons discussed below. Accordingly, it is believed to be unnecessary to separately place Claims 5, 7-11, 14 and 16-20 in independent form at this time.

**Comment on Statement of Reasons for Allowance**

On pages 7-8 of the Office Action, the Examiner offers a statement of reasons why Claims 1-2, 5, 7-11, 14 and 16-20 are considered to recite allowable subject matter. Applicants agree that Claims 1-2, 5, 7-11, 14 and 16-20 recite allowable subject matter. However, Applicants do not agree in all respects with the statement of reasons for allowance. For example, Applicants believe that the stated reasons should not be interpreted to mean that they are the only reasons supporting the allowability of these claims, and that there are no other reasons that separately and independently support the allowability of the independent claims and/or the dependent claims.

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Independent Claim 12 - 35 U.S.C. §103

Independent Claim 12 stands rejected under 35 USC §103 as obvious over Sharpe U.S. Patent No. 5,490,079, taken in view of Lee U.S. Patent No. 6,539,050. This ground of rejection is respectfully traversed. In this regard, the PTO recognizes in MPEP §2142 that:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

Applicants respectfully submit that the teachings drawn from Sharpe and Lee fail to establish a *prima facie* case of obviousness under §103 with respect to Claim 12, for the mutually exclusive reasons that are discussed below.

**SHARPE DOES NOT TEACH WHAT THE OFFICE ACTION SAYS IT DOES**

The Office Action asserts at lines 24-26 on page 4 that Sharpe discloses a transmitter section that is "responsive to receipt by said receiver section of a respective said signpost signal for including in at least one said beacon signal the signpost code from the received signpost signal". However, it is respectfully submitted that Sharpe does not actually disclose this.

More specifically, Sharpe discloses in Figure 2 a tag 24 with a memory 30 that stores the locations of various known toll areas 14, 16, 18 and 20 (Figure 1), such as toll plazas and parking lots (lines 14-15 of column 3). The tag 24 has a global positioning system (GPS) sensor 32 that receives GPS signals from conventional GPS satellites 46. The tag 24 compares the GPS location information received from the GPS satellites 46 with the information in the memory 30, in order to determine whether the tag 24 is currently in the vicinity of a toll area (lines 17-20 of column 3). When the tag 24 determines that it is near a toll area, it turns on its transmitter 38, in order to send a wireless signal to a sentry receiver 52 at the toll area (lines 27-35 of column 3).

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The wireless signal identifies the particular tag 24, in order to effect automated payment of the applicable toll. Sharpe recognizes that factors such as terrain may sometimes prevent the tag 24 from receiving GPS signals (lines 57-63 of column 3). Accordingly, Sharpe teaches that some toll areas may have a signpost transmitter 50 to transmit a wireless signpost signal to a signpost receiver 36 of the tag 24. This signpost signal contains a fixed code representing the location of the signpost transmitter 50 (line 67 of column 3 to line 3 of column 4). When the signpost sensor 36 of the tag 24 receives this fixed code, it supplies the code to the computer 34 within tag 24. The computer 34 then uses the location information from this fixed code in the same manner that it would have used the GPS location information from the GPS sensor 32, if the sensor 32 was not currently prevented from receiving GPS information (lines 4-9 of column 4).

However, and contrary to the assertions in the Office Action, Sharpe does not teach or even suggest that the fixed code received at 36 from the signpost transmitter 50 is ever transmitted by the tag 24 through its transmitter 38 to the sentry receiver 52. (In fact, it would make no sense for Sharpe's signpost code to be transmitted to the toll area through the sentry receiver 52, because the code merely represents the location of the toll area, and the toll area already knows where it is located). Thus, Sharpe does not teach what the Office Action says it does. It is therefore respectfully submitted that Sharpe fails to fulfill its intended role in the §103 rejection.

#### LEE DOES NOT TEACH WHAT THE OFFICE ACTION SAYS IT DOES

The Office Action asserts at lines 4-6 on page 5 that Lee discloses a transmitter section that is "responsive to receipt by said receiver section of one of said signpost signals for automatically effecting variation in a predetermined manner of at least one of a transmission power level and a transmission rate for said beacon signals". However, it is respectfully submitted that Lee does not actually disclose this.

More specifically, Lee discloses in Figure 1 a system where wireless signals can be exchanged at 12 or 16 between a base station 10 and each of several receivers (such as cellular

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telephones 14 and/or computers 18). Figures 7 and 8 of Lee each disclose a respective technique that can be used by any receiver 14 or 18 to adjust its transmission power level and/or its data transmission rate. As explained in Lee from line 46 of column 7 through line 46 of column 8, these adjustments to power level and/or transmission rate are carried out as a function of a data error rate for the wireless signals transmitted at 12 or 16 between the base station 10 and the particular receiver 14 or 18. In other words, the transmission power and/or transmission rate of the wireless signals 12 or 16 are adjusted on the basis of a characteristic of those wireless signals themselves, where the characteristic is an error rate. Applying this to the context of the present invention, it would mean that the transmission power level and/or a transmission rate for wireless beacon signals would be adjusted as a function of an error rate of the beacon signals themselves. But that is different from what is recited in Applicants' Claim 12. In particular, Applicants' Claim 12 recites variation of the transmission power level and/or the transmission rate for the beacon signals, not as a function of some characteristic of the beacon signals themselves, but instead as a function of other wireless signals, which are the signpost signals. Lee does not teach that any receiver 14 or 18 ever receives any form of further wireless signal (in addition to the wireless signals exchanged at 12 and 16), much less a further wireless signal of a type generally known as a signpost signal. That is, the Lee patent does not teach what the Office Action says it does. It is therefore respectfully submitted that Lee fails to fulfill its intended role in the §103 rejection.

#### THE PROPOSED COMBINATION DOESN'T TEACH THE CLAIMED SUBJECT MATTER

Sharpe and Lee, even when combined, do not teach the subject matter of Claim 12. The provisions of MPEP §2142 specify with respect to §103 that:

To establish a *prima facie* case of obviousness . . . the prior art reference (or references when combined) must teach or suggest all the claim limitations. (Emphasis added).

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Applicants' Claim 12 includes a recitation of:

... causing said transmitter section to be responsive to receipt by  
said receiver section of a respective said signpost signal for  
including in at least one said beacon signal the signpost code from  
the received signpost signal; ...

The Office Action asserts that this limitation is met by Sharpe. However, as  
discussed above, Sharpe does not teach or even suggest this limitation.

Applicants' Claim 12 also includes a recitation of:

... causing said transmitter section to be responsive to receipt by  
said receiver section of one of said signpost signals for  
automatically effecting variation in a predetermined manner of at  
least one of a transmission power level and a transmission rate for  
said beacon signals.

The Office Action asserts that this limitation is met by Lee. However, as discussed above, Lee  
does not teach or even suggest this limitation. Consequently, Sharpe and Lee do not teach all of  
the limitations of Claim 12, and thus do not establish a prima facie case of obviousness under  
§103, because they fail to meet one of the essential requirements for a prima facie case (as  
discussed in MPEP §2142). Therefore, for this independent reason alone, it is respectfully  
submitted that Claim 12 is not rendered obvious under §103 by Sharpe and Lee, and notice to  
that effect is respectfully requested.

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### THE COMBINATION OF REFERENCES IS IMPROPER

There is yet another reason why the teachings drawn from Sharpe and Lee cannot be combined under §103 to reject Claim 12. In this regard, MPEP §2142 provides that:

To reach a proper determination under §103, the examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. . . . Knowledge of applicant's disclosure must be put aside in reaching this determination, . . . impermissible hindsight must be avoided, and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

The MPEP further provides at § 2143.01 that:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. . . . Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so". (Emphasis in original).

In the present application, the closest that the Office Action comes to addressing motivation for the proposed combination is an assertion at lines 9-18 on page 5 that:

it would have been obvious to a person skilled in the art at the time the invention was made to include said transmitter section is

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responsive to receipt by said receiver section of one of said signpost signals for automatically effecting variation in a predetermined manner of at least one of a transmission power level and a transmission rate for said beacon signals in the device of Sharpe because Sharpe suggests detector receiving the reflected component and Lee teaches said transmitter section is responsive to receipt by said receiver section of one of said signpost signals for automatically effecting variation in a predetermined manner of at least one of a transmission power level and a transmission rate for said beacon signals for the purpose of providing optimum transmission.

In effect, this assertion takes the position that the claimed invention would have been well within the ordinary skill of the art at the time the invention was made, because Sharpe and Lee supposedly teach that all aspects of the claimed invention were individually known in the art. A first problem is that, as discussed above, Sharpe and Lee do not actually disclose what the Office Action says they do. For example, the quoted assertion is wrong in stating that "Lee teaches said transmitter section is responsive to receipt by said receiver section of one of said signpost signals for automatically effecting variation in a predetermined manner of at least one of a transmission power level and a transmission rate", because Lee does not actually disclose this. Beyond that, a second problem is that this assertion takes an approach to motivation that is directly prohibited by the provisions of MPEP §2143.01, which state that:

**FACT THAT THE CLAIMED INVENTION IS WITHIN THE CAPABILITIES OF ONE OF ORDINARY SKILL IN THE ART IS NOT SUFFICIENT BY ITSELF TO ESTABLISH *PRIMA FACIE* OBVIOUSNESS**

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A statement that modifications of the prior art to meet the claimed invention would have been " well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. [Case citations omitted] . . . (The level of skill in the art cannot be relied upon to provide the suggestion to combine references).

Since the approach to motivation in the Office Action boils down to an assertion that the claimed invention would have been well within the ordinary skill of the art at the time the invention was made because the references relied upon supposedly teach that all aspects of the claimed invention were individually known in the art, the Office Action takes an approach that is directly prohibited by MPEP §2143.01. In effect, the §103 rejection is based on hindsight of the present invention, rather than on motivation properly derived from what was known prior to the present invention. Proper demonstration of motivation is an essential requirement of a *prima facie* case of obviousness under §103. For example, MPEP §2142 specifies that:

To establish a *prima facie* case of obviousness, . . . there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. . . . The teaching or suggestion to make the claimed combination . . . must . . . be found in the prior art, and not based on applicant's disclosure.

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Here, the Office Action offers no proper rationale as to why there would be any motivation to make the proposed combination of Sharpe and Lee (even assuming that Sharpe and Lee actually disclosed what the Office Action says they disclose). The present §103 rejection of Claim 12 is therefore incomplete, because it fails to demonstrate the motivation that is required by the MPEP. Accordingly, for this independent reason alone, it is respectfully submitted that Claim 12 is not rendered obvious under §103 by Sharpe and Lee.

For each of the various different reasons discussed above, it is respectfully submitted that Claim 12 is not obvious under §103 in view of Sharpe and Lee. Claim 12 is therefore believed to be allowable, and notice to that effect is respectfully requested.

Independent Claim 12 - Double Patenting

The Office Action rejects independent Claim 12 for obviousness-type double patenting based on Claim 13 of Eagleson U.S. Patent No. 6,765,484, taken in view of Lee U.S. Patent No. 6,539,050. This ground of rejection is respectfully traversed, for the following reasons. In the sentence bridging pages 2-3, the Office Action admits that Claim 13 of Eagleson:

does not teach said transmitter section is responsive to receipt by  
said receiver section of one of said signpost signals for  
automatically effecting variation in a predetermined manner of at  
least one of a transmission power level and a transmission rate for  
said beacon signals.

The Office Action therefore turns to Lee, asserting that:

Lee teaches, in the art of transmission system, said transmitter  
section is responsive to receipt by said receiver section of one of

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said signpost signals for automatically effecting variation in a predetermined manner of at least one of a transmission power level and a transmission rate for said beacon signals.

However, as already discussed above, this is not what Lee actually teaches. In particular, and aside from the wireless signals exchanged at 12 and 16 (Figure 2), Lee does not teach that any receiver 14 or 18 receives any form of further wireless signal, much less a further wireless signal of a type generally known as a signpost signal, still less a further wireless signal that causes variation of the transmission power level and/or the transmission rate of the wireless signals exchanged at 12 and 16. Lee thus does not teach what the Office Action says it does. It is therefore respectfully submitted that the proposed modification of Eagleson Claim 13 would not really be obvious in view of the teachings of Lee. Consequently, it is respectfully submitted that Applicants' Claim 12 does not involve obviousness-type double patenting with respect to Eagleson Claim 13 (even when considered in light of Lee), and notice to that effect is respectfully requested.

Independent Claim 3

Independent Claim 3 stands rejected under 35 USC §103 as obvious over Sharpe and Lee. This ground of rejection is respectfully traversed. The rationale given in the Office Action for the rejection of Claim 3 is the same rationale given for the rejection of Claim 12. Claim 3 includes the following limitations:

... said transmitter section being responsive to receipt by said receiver section of a respective said signpost signal for including in at least one said beacon signal the signpost code from the received signpost signal;

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wherein said transmitter section is responsive to receipt by  
said receiver section of one of said signpost signals for  
automatically effecting variation in a predetermined manner of at  
least one of a transmission power level and a transmission rate for  
said beacon signals.

With these claim limitations in mind, it is respectfully submitted that, for reasons similar to those discussed above in association with Claim 12, Claim 3 is not obvious under §103 in view of Sharpe and Lee. Claim 3 is therefore believed to be allowable, and notice to that effect is respectfully requested.

Dependent Claims

Claims 4 and 6 and Claims 13 and 15 respectively depend from Claim 3 and Claim 12, and are also believed to be distinct from the art of record, for example for the same reasons discussed above with respect to Claims 3 and 12.

Conclusion

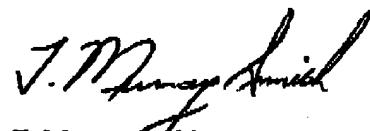
Based on the foregoing, it is respectfully submitted that all of the pending claims are fully allowable, and favorable reconsideration of this application is therefore respectfully requested. If the Examiner believes that examination of the present application may be advanced in any way by a telephone conference, the Examiner is invited to telephone the undersigned attorney at 972-739-8647.

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Although Applicants believe that no fee is due in association with the filing of this Response, the Commissioner is hereby authorized to charge any additional fee required by this paper, or to credit any overpayment, to Deposit Account No. 08-1394 of Haynes and Boone LLP.

Respectfully submitted,



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Enclosures: None

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